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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/748,720	12/26/2000	Byron J. Slater	00P9121US	4203
28524	7590	03/09/2006	EXAMINER	
SIEMENS CORPORATION INTELLECTUAL PROPERTY DEPARTMENT 170 WOOD AVENUE SOUTH ISELIN, NJ 08830			NGUYEN, DANNY	
			ART UNIT	PAPER NUMBER
			2836	

DATE MAILED: 03/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/748,720

Applicant(s)

SLATER ET AL.

Examiner

Danny Nguyen

Art Unit

2836

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 December 2005.
 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 and 24-38 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) ☒ Claim(s) 32 and 33 is/are allowed.
 6) ☒ Claim(s) 1-5, 25-29, 34, 35, 37 and 38 is/are rejected.
 7) ☒ Claim(s) 24, 30, 31 and 36 is/are objected to.
 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
 Paper No(s)/Mail Date _____.
 4) ☐ Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____.
 5) ☐ Notice of Informal Patent Application (PTO-152)
 6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. In view of the appeal brief filed on 12/27/2005, PROSECUTION IS HEREBY REOPENED. A new ground rejections is set forth below

To avoid abandonment of the application, appellant must exercise one of the following two options:

- (1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,
- (2) request reinstatement of the appeal.

If reinstatement of the appeal is requested, such request must be accompanied by a supplemental appeal brief, but no new amendments, affidavits (37 CFR 1.130, 1.131 or 1.132) or other evidence are permitted. See 37 CFR 1.193(b)(2).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Cooper et al (USPN 4,630,163). Cooper discloses a surge protection apparatus (such as protector circuit in figure 5) connected between an AC electrical utility power line (AC power 124) and a load (134) comprises a voltage input (a voltage input is coupled to the AC power source 124) coupled to the AC electrical utility power line, the AC electrical utility power

line having a nominal AC voltage of at least about 120 volts (the plug in figure 4 is coupled to the standard wall outlet which includes an AV voltage at last 120 volts) ;an inductor (inductor 122 in figure 5) coupled between the voltage input and the load; and a protective barrier (such as a housing 100 in figure 4) interposed between the inductor and the load, the protective barrier configured to physically isolate the inductor from the load.

3. Claims 1 and 3 are rejected under 35 U.S.C. 102(b) as being anticipated by Chen et al (USPN 5,999,384). Chen discloses a protection apparatus (such as protector circuit in figures 3-5) connected between an AC electrical utility power line (AC power lines 25 and 26) and a load (such as a load in figure 1) comprises a voltage input (a voltage input is coupled to the AC power lines) coupled to the AC electrical utility power line, the AC electrical utility power line having a nominal AC voltage of at least about 120 volts (e.g. col. 4, lines 41-44); an inductor (inductor coil 30) coupled between the voltage input and the load; a PPTC device (12, col. 4, lines 46-50) and a protective barrier (such as a housing in figures 4 and 5) interposed between the inductor and the load, the protective barrier configured to physically isolate the inductor and the PPTC device from the load.

4. Claim 2 is rejected under 35 U.S.C. 102(b) as being anticipated by McTavish et al (USPN 4,549,161). McTavish discloses a protection apparatus (figures 1, 2) connected between an AC electrical utility power line (AC power source 101 in figure 2) and a load (load 103) comprises a voltage input (input voltage is coupled to the AC power source 101) coupled to the AC electrical utility power line, the AC electrical utility

power line having a nominal AC voltage of at least about 120 volts (e.g. col. 8, lines 55-56) an polymeric positive temperature coefficient device (such as polymer PTC 102 is considered as PPTC device, e.g. col. 3, lines 39-44) coupled between the voltage input and the load; and a protective barrier (such as enclosure in figure 1) interposed between the PPTC and the load, the protective barrier configured to physically isolate the PPTC from the load (e.g. col. 1, 2, lines 65-2, and col. 7, lines 67-68).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 4, 5, 25-27, 34, 35, 37, 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Polgreen (USPN 4937699) in view of Lai et al. (USPN 6,210,232)

Regarding claims 4, 37 Polgreen discloses a protection circuit (protection circuit in figures 23) coupled between an electrical power line and a load (e.g. power line is connected to receptacle (in figure 2) and a load (such as low voltage circuit, col. 1, 2, lines 67-4) comprises a voltage input (such as voltage input of the receptacle is coupled to the power line), an inductor (40), a resistor (36) having a resistance of at least about 10 ohms (col. 3, lines 31-32), and a fuse (44) coupled in series between the voltage input and the load. Polgreen does not disclose a PPTC as claimed. However, Lai teaches that the fuse can be interchange with a PPTC device (col. 1, lines 14-18). It would have been obvious to one of ordinary skill in the art at the time the invention was

made to have replaced the fuse of Polgreen with the PPTC device as disclosed by Lai because the PPTC device can be reset automatically without physical access to it.

Regarding claims 5, 35, Polgreen discloses a protective barrier (housing 12) is configured to physically isolate the inductor, the resistor, and the fuse from the load (the protection circuit which includes the inductor, the resistor and the fuse are housed in the housing 12 are physically isolated from the load). Polgreen does not disclose a PPTC as claimed. However, Lai teaches that the fuse can be interchange with a PPTC device (col. 1, lines 14-18). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have replaced the fuse of Polgreen with the PPTC device as disclosed by Lai because the PPTC device can be reset automatically without physical access to it.

Regarding claims 27, and 38, Polgreen disclose the resistor (36) includes axial leads (72 and 76).

Regarding claim 25, Polgreen discloses the resistor (16) has a resistance of at least 10 ohms (the resistor 16 has a resistance value of 16 ohms, col. 3, lines 31-32).

Regarding claim 26, Polgreen discloses the resistor (36) has a resistance of 16 ohms, but does not disclose the resistor has a value as claimed. However, the specification contains no disclosure the resistor has a resistance value of approximately 50 ohms is critical. It would have been obvious to one having ordinary skill in the art at the time the invention was made to select the resistance value of the resistor to any desired value as long as it compatible with the requirements of other elements in the circuit in order to properly current limit function of the protection circuit. It has been held

that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

Regarding claim 34, Polgreen discloses a protection circuit (protection circuit in figures 23) coupled between an electrical power line and a load (e.g. power line is connected to receptacle (in figure 2) and a load (such as low voltage circuit, col. 1, 2, lines 67-4) comprises a voltage input (such as voltage input of the receptacle is coupled to the power line), an inductor (40), a resistor (36), and a fuse (44) coupled in series between the voltage input and the load. Note the inductor and the fuse are coupled in series, they are inherently interchanged their position with each other without affecting the result of the circuit. Polgreen does not disclose a PPTC as claimed. However, Lai teaches that the fuse can be interchange with a PPTC device (col. 1, lines 14-18). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have replaced the fuse of Polgreen with the PPTC device as disclosed by Lai because the PPTC device can be reset automatically without physical access to it.

6. Claims 4, 28, 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cooper et al (USPN 4,630,163) in view of Lai et al. (USPN 6,210,232). Cooper discloses a protection circuit (protection circuit in figures 5) coupled between an electrical power line and a load (e.g. power line 124 in figure 5) and a load (34) comprises a voltage input (such as voltage input is coupled to the power supply 124), an inductor (122), a resistor (116), and a fuse (118) coupled in series between the voltage input and the load. Cooper does not disclose a PPTC as claimed. However, Lai teaches that the fuse can be interchange with a PPTC device (col. 1, lines 14-18). It

would have been obvious to one of ordinary skill in the art at the time the invention was made to have replaced the fuse of Cooper with the PPTC device as disclosed by Lai because the PPTC device can be reset automatically without physical access to it.

Allowable Subject Matter

Claims 32, 33 are allowed.

6. Claims 24, 30, 31, 36 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Danny Nguyen whose telephone number is (571)-272-2054. The examiner can normally be reached on Mon to Fri 8:00 AM to 4:30 PM.

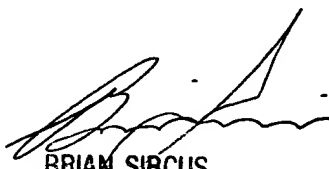
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Sircus can be reached on (571)-272-2058. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2836

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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3/3/2006


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